except a small one on the second true rib and a trace on the third, is struthious enough. The pelvis looks, at first sight, but a few removes from that of the Hen; and in so much as it differs from the pelvis of the Emeu or the Apteryx (which have very compressed pelves, whilst this is broad and gently arched), in the same degree does it approach that of the Fowl. The preacetabular spur of the ilium is there; but the postfemoral part of that bone looks as if it had been pared away, leaving an enormous ischiadic *notch*, which is a *foramen* in typical birds. The tail is a mere pretence (as Wagler's term *Nothura* well expresses); the caudal vertebræ are therefore but little better than those of an Ostrich. The strong legs leave us the choice, at first sight, of referring them to either the Fowl or the Ostrich; and the heel, small and high up, is gallinaceous. But the tarso-metatarsus, covered with transverse plates in front, has the posterior two-thirds invested by an intensely strong imbrication of horny scales; thus adapting the leg of the bird to that odd sitting position (about as elegant as that of the Ass in the first stage of the erect posture) in which the *Struthionidæ* delight."

MISCELLANEOUS.

On Chlamyphorus. By Dr. Burmeister.

Dr. Burmeister has sent from Buenos Ayres the description of a second species of *Chlamyphorus*. He defines them thus:—

1. *Chlamyphorus truncatus*. Minor, chlamyde dorsali lateribus libere dependente, subtus cum artubus vellere molli recto subsericeo indutus; cauda thecaque anali perfecte cataphractæ.
   Hab. Mendoza.
2. *Chlamyphorus retusus*. Major, chlamyde dorsali lateralibus corporis adnata, subtus cum artubus intus vellere undulato, sat lanuginoso indutus; cauda thecaque anali imperfecte cataphractæ.
   Hab. Circa oppidum Stæ. Crucis de la Sierra Bolivia.

He gives three figures of the species.

On the Action of Magenta upon Vegetable Tissue. By J. G. Lynde, F.G.S., M. Inst. C.E.

The author describes a series of experiments upon cuttings of *Vallisneria* immersed in a solution of magenta in cells under the microscope, and its effect upon the circulation in the plant. He found that so long as the vital action continued, the cell-walls and the moving chlorophyll retained their green colour, but the injured cells were immediately deeply reddened, and their contents gradually acquired the same colour, the intensity of which was in proportion to the thickness or density of the tissue. Between the cell-walls it would appear that there exists an intercellular membrane, devoid of

vital action, which becomes rapidly coloured whilst the circulation continues active. On the inner surface of the cell-wall, whilst rotation is going on, the author observed a luminous stratum suggesting the action of cilia, but in every observation, as the dye permeated the tissue and the circulation ceased, the true cell-wall became covered with irregular markings, either corrugated or having raised excrescences, scarcely alike in any two cells; in no case were the markings visible until the rotation had ceased, and they had the appearance which would be produced by cilia falling against the cell-wall in all positions upon the suspension of vital action.

The chlorophyll-vesicles appear in three forms—in a gelatinous sac or mass rotating altogether in the cells, as independent vesicles apparently homogeneous in their structure, rendered opake by colouring matter, and, lastly, as independent vesicles somewhat increased in size, of a pale green colour, almost transparent, containing nuclei, one, two, or three in number, which in reality appear to be immature vesicles within the parent, similar to *Volvox globator*, without rotatory motion. The chlorophyll-vesicles appear to resist the action of the magenta for some time after their rotation has ceased, indicating a vitality, at least to a certain extent, independent of that of the cell. In some of the experiments a few of the cells assumed a purplish colour, whilst in the adjoining cells the circulation was active and the chlorophyll green; in those the chlorophyll appeared to be decomposed, and the cell to be nearly full of very minute dots, swarming like the granules in *Closterium lunula*. Upon this subject the author offered no opinion. The observations were made with $\frac{1}{5}$th and $\frac{1}{8}$th objectives; and the paper contained minutiæ of several experiments, with the hours of observation, temperature of the room, and other particulars.—*Proceedings of the Literary and Philosophical Society of Manchester*, March 1863.

The Ringed Seal (Phoca fœtida).

A specimen of this animal was caught at Aberystwith during last month, and has been exhibited alive in London. It is now in the Collection of the British Museum.—J. E. Gray.

On the Nature of the Gas produced from the Decomposition of Carbonic Acid by Leaves exposed to the Light. By M. Boussingault.

In an interesting paper in the 'Ann. Sc. Nat.' (Bot.) sér. 4, vol. xvi. pp. 1–27, 1862, referring to the history of discovery in respect to the relations of plants to the atmosphere, Boussingault remarks that Bonnet first took notice of the emission of air from the surface of leaves. Priestley recognized this air to be oxygen; Ingenhous showed the presence of light to be necessary; and Senebier proved that the oxygen gas eliminated by leaves under the light of the sun